

United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, VA 22135-5068

MASTER OF MILITARY STUDIES

COMBAT SEARCH AND RESCUE: AN AMERICAN WAY OF WAR

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

LCDR CHRISTOPHER C. DUNPHY, USN

AY 2000-01

Mentor: Charles D. McKenna, Ph.D.

Approved: _____

Date: _____

Mentor: Lt Col John R. Atkins, USAF

Approved: _____

Date: _____

Report Documentation Page		
Report Date 2002	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle Combat Search and Rescue: An American Way of War	Contract Number	
	Grant Number	
	Program Element Number	
Author(s)	Project Number	
	Task Number	
	Work Unit Number	
Performing Organization Name(s) and Address(es) Joint Military Operations Department Navy War College 686 Cushing Road Newport, RI 02841-1207		Performing Organization Report Number
Sponsoring/Monitoring Agency Name(s) and Address(es)	Sponsor/Monitor's Acronym(s)	
	Sponsor/Monitor's Report Number(s)	
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes		
Abstract <p>This paper examines the period that has had the greatest impact on present CSAR force structure, namely, the years of the conflict in Southeast Asia during the period 1961 to 1975. If one believes that military operations throughout the entire spectrum of conflict can only be successfully executed if the people support the decisions of the government and the actions of the forces in the field, then the armed forces must be capable of effecting the recovery of isolated personnel during these operations. In future conflicts, operations, or wars a commander who shapes the battlespace by using air power may encounter an American public that will probably expect a minimum of casualties and the timely recovery of any downed aircrew not immediately captured. Consequently, as we enter the 21 st century, our leaders must understand that CSAR is not a nice to have capability. It is a requirement for a nation that relies on decisive air power, precision engagement, and dominant maneuver. These discussions should help to confront the corollary questions, to what length should the U. S. armed forces conduct CSAR and can our current CSAR capability meet the requirements of our nation and military commanders at both the strategic and operational levels of war?</p>		
Subject Terms		
Report Classification unclassified		Classification of this page unclassified

Classification of Abstract unclassified	Limitation of Abstract UU
Number of Pages 70	

REPORT DOCUMENTATION PAGE

FORM APPROVED - - - OMB NO. 0704-0188

public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters services, directorate for information operations and reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the office of management and budget, paperwork reduction project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (LEAVE BLANK)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED STUDENT RESEARCH PAPER
4. TITLE AND SUBTITLE COMBAT SEARCH AND RESCUE: AN AMERICAN WAY OF WAR		5. FUNDING NUMBERS N/A
6. AUTHOR(S) LCDR CHRISTOPHER C. DUNPHY, USN		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USMC COMMAND AND STAFF COLLEGE 2076 SOUTH STREET, MCCDC, QUANTICO, VA 22134-5068		8. PERFORMING ORGANIZATION REPORT NUMBER NONE
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) SAME AS #7.		10. SPONSORING/MONITORING AGENCY REPORT NUMBER: NONE
11. SUPPLEMENTARY NOTES NONE		
12A. DISTRIBUTION/AVAILABILITY STATEMENT NO RESTRICTIONS		12B. DISTRIBUTION CODE N/A
13. ABSTRACT (<i>maximum 200 words</i>) <p>THIS PAPER EXAMINES THE PERIOD THAT HAS HAD THE GREATEST IMPACT ON PRESENT CSAR FORCE STRUCTURE, NAMELY, THE YEARS OF THE CONFLICT IN SOUTHEAST ASIA DURING THE PERIOD 1961 TO 1975.</p> <p>IF ONE BELIEVES THAT MILITARY OPERATIONS THROUGHOUT THE ENTIRE SPECTRUM OF CONFLICT CAN ONLY BE SUCCESSFULLY EXECUTED IF THE PEOPLE SUPPORT THE DECISIONS OF THE GOVERNMENT AND THE ACTIONS OF THE FORCES IN THE FIELD, THEN THE ARMED FORCES MUST BE CAPABLE OF EFFECTING THE RECOVERY OF ISOLATED PERSONNEL DURING THESE OPERATIONS. IN FUTURE CONFLICTS, OPERATIONS, OR WARS A COMMANDER WHO SHAPES THE BATTLESPACE BY USING AIR POWER MAY ENCOUNTER AN AMERICAN PUBLIC THAT WILL PROBABLY EXPECT A MINIMUM OF CASUALTIES AND THE TIMELY RECOVERY OF ANY DOWNED AIRCREW NOT IMMEDIATELY CAPTURED. CONSEQUENTLY, AS WE ENTER THE 21ST CENTURY, OUR LEADERS MUST UNDERSTAND THAT CSAR IS NOT A 'NICE TO HAVE' CAPABILITY. IT IS A REQUIREMENT FOR A NATION THAT RELIES ON DECISIVE AIR POWER, PRECISION ENGAGEMENT, AND DOMINANT MANEUVER.</p> <p>THESE DISCUSSIONS SHOULD HELP TO CONFRONT THE COROLLARY QUESTIONS, TO WHAT LENGTH SHOULD THE U. S. ARMED FORCES CONDUCT CSAR AND CAN OUR CURRENT CSAR CAPABILITY MEET THE REQUIREMENTS OF OUR NATION AND MILITARY COMMANDERS AT BOTH THE STRATEGIC AND OPERATIONAL LEVELS OF WAR?</p>		

14. SUBJECT TERMS (KEY WORDS ON WHICH TO PERFORM SEARCH) COMBAT SEARCH AND RESCUE, CSAR, AMERICAN WAY OF WAR		15. NUMBER OF PAGES: 58	
		16. PRICE CODE: N/A	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE: UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT

DISCLAIMER

THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

Preface

This research paper examines the genesis of the organization, resources and doctrine of the airborne combat search and rescue forces of the United States armed forces. As a member of a group of aviators whose mission is to train and deploy as combat search and rescue (CSAR) crews, I see our mission as a type of combat, or a way of war fighting. It is not a mission that is unique to the United States, but other forces have not traditionally and do not currently commit the resources at the same level as the United States.

I believe that the history of the CSAR mission is a unique part of our military history. It is a history full of many extraordinary rescue missions of isolated personnel, some of which were successful and others that were not. It is also a history rich in human drama, with an endless cast of courageous warfighters dedicated to the preservation of life. CSAR missions conducted by both German and American forces date to World War II but the most dramatic increase in dedicated resources and tactical development occurred during the air war over Southeast Asia from 1961 through 1975. In the context of this paper I have selected only a few of many rescue missions from this time period to highlight points and illustrate ideas.

As a testament to the crews who have conducted some of the most harrowing missions in the history of aviation warfare, I have examined the foundation of American heritage and values, and how they are interwoven into the framework of the CSAR mission. These discussions help to define combat search and rescue as what I deem as an American way of war.

I would like to acknowledge the guidance and assistance I received throughout this project from my academic mentor, Dr. C. McKenna, Ph. D. and faculty advisor, Lt. Col. J. Atkins, USAF. Their support was instrumental and was always greatly appreciated.

Executive Summary

Title: Combat Search and Rescue: An American Way of War

Author: LCDR Christopher C. Dunphy, USN

Thesis: In underlying principle and in execution, combat search and rescue is in fact 'an American way of war.'

Discussion: This paper examines the period that has had the greatest impact on present CSAR force structure, namely, the years of the conflict in Southeast Asia during the period 1961 to 1975.

If one believes that military operations throughout the entire spectrum of conflict can only be successfully executed if the people support the decisions of the government and the actions of the forces in the field, then the armed forces must be capable of effecting the recovery of isolated personnel during these operations. In future conflicts, operations, or wars a commander who shapes the battlespace by using air power may encounter an American public that will probably expect a minimum of casualties and the timely recovery of any downed aircrew not immediately captured. Consequently, as we enter the 21st century, our leaders must understand that CSAR is not a 'nice to have' capability. It is a requirement for a nation that relies on decisive air power, precision engagement, and dominant maneuver.

These discussions should help to confront the corollary questions, to what length should the U. S. armed forces conduct CSAR and can our current CSAR capability meet the requirements of our nation and military commanders at both the strategic and operational levels of war?

Conclusions: Based on the research conducted involving the operational experiences, the doctrine, tactics, techniques, and procedures of historical CSAR missions the evidence supports the conclusion that CSAR is warfighting. Also evident is that search and rescue came of age and earned its title as 'combat search and rescue' in the skies over Southeast Asia in the 1960s and 70s. Hence, CSAR is now embedded in our service and joint warfighting doctrine.

Table of Contents

DISCLAIMER	ii
PREFACE	ii
EXECUTIVE SUMMARY	v
TABLE OF CONTENTS	vi
INTRODUCTION	1
Definition	2
VIETNAM, THE BEGINNING	5
Geography	5
Southeast Asia, 1961-1964	6
Search and Rescue Doctrine, 1961-1964	9
Air War Transition	12
Development of Coordinated CSAR	13
The Changing Battlefield	16
Bat 21 Bravo Rescue Mission	18
The Aftermath of the Bat 21 Bravo Rescue	21
AN AMERICAN WAY OF WAR	24
The Culminating Point	24
An American Way of War	27
A Military Heritage	29
Virtues and Traits of Character	32
The Necessity of CSAR	33
OPERATIONS TODAY AND TOMORROW	36
CSAR Operations Today	36
Current and Future CSAR Capabilities	41
Limits of Joint Doctrine	43
CONCLUSION	48
A Way of War	48
Warfighting Heritage	50
APPENDICES	53
Appendix A – CSAR Organizational Charts	53
BIBLIOGRAPHY	57

Introduction

It is true I must run great risk; no gallant action was
ever accomplished without danger.

John Paul Jones: Letter to the
American Commissioners in Paris,
1778¹

You can't put a price on someone's life, and in our
armed forces we are committed to doing everything we can
to bring our people home. This commitment is rooted in
our values as Americans and in the bonds forged between
those under fire.

General Henry H. Shelton, USA
Speech to the Personnel Recovery
conference, Ft. Belvoir 27 October
1999

As war fighting capabilities have developed over the
last fifty years, whenever an American airman, sailor, or
soldier has been isolated in enemy territory, U. S. armed
forces have put forth incredible efforts and expended vast
amounts of resources to recover this service member. The
conduct of a combat rescue is not a by-product of late 20th
century warfare. The act of rescuing a fellow war fighter
from capture or death is not a new concept. Throughout our
history there are probably thousands of untold stories of
Americans who have risked their lives to rescue comrades
during combat, from major engagements to isolated firefights.
One may ask the question, why would rescuers risk their lives
to recover someone who they probably do not know? What

motivates and inspires these rescuers to conduct combat rescues, one of the most dangerous missions conducted by our armed forces?

Definition

The definition of combat search and rescue (CSAR), which will be the basis for all of the following discussions, is stated in Joint Pub 3-50.2. CSAR is, "A specific task performed by rescue forces to effect the recovery of distressed personnel during war or military operations other than war."² The definition used in current Joint doctrine refers to personnel in general and rescue forces in a generic sense. Another point that can be drawn from the definition of CSAR is the lack of the word 'search.' This will be discussed later. What the definition does not provide the reader is the sense that the recovery of distressed personnel is usually carried out by reaching into the realms of organized chaos to remove, without delay, a specific person or persons from the risk of injury, capture, or possibly death.³

¹ Robert D. Heinl, Dictionary of Military and Naval Quotations, (Annapolis, Maryland: U.S. Naval Institute, 1966), 281.

² Doctrine for Joint Combat Search and Rescue, Joint Pub 3-50.2, GL-4.

³ Darrel Whitcomb, "Combat Search and Rescue a Longer Look," Aerospace Power Journal, Summer 2000, 29.

In this paper I plan to investigate the genesis of the organization, resources, and doctrine of our present airborne CSAR forces. So I will examine the period that has had the greatest impact on present force structure, namely, the years of the conflict in Southeast Asia during the period 1961 to 1975⁴.

With the advent of instantaneous media coverage of world events, we have seen enemy forces and governments exploit captured American citizens and downed-aircrew for political purposes with the intent of trying to undermine our nation's will to fight. This raises an underlying question: Are captured American citizens and downed-aircrew a critical vulnerability of the United States and to what length will the United States commit resources and manpower to protect this vulnerability?

I will discuss why CSAR can be called 'an American way of war' by looking at the character, ethics, and morals of American war fighters. These discussions should help to confront the corollary questions, to what length should the U. S. armed forces conduct CSAR and can our current CSAR

⁴ The term Southeast Asia conflict will be used throughout this paper to define a conflict that directly and indirectly included many of the sovereign countries of Southeast Asia, to include: North and South Vietnam, Laos, Cambodia, and Thailand. From early 1961 through the final withdrawal of American personnel from South Vietnam in 1975, many CSAR mission involved both direct-action and supporting assets flying from and over several different Southeast Asian countries. Some CSAR missions were conducted in or over the sovereign territory of nations which the U. S. was not at war with or directly defending.

capability meet the requirements of our nation and military at both the strategic and operational levels of war?

As in any type of combat or war fighting, it is the fighter, the man or woman who will ultimately commit themselves to the mission and enter the fight. Brig. Gen. Thomas Dubose, USAF commander of the Air Rescue Service from 1952 to 1959, stated,

To me it has always been a source of wonder and pride that the most potent and destructive military force ever known should create a special service dedicated to saving life. Its concept is typically American ... we hold human lives to be the most precious commodity on earth.⁵

Today, the United States still "[has] the most potent and destructive military force ever known" and has proven that it will commit manpower, resources and human energy to rescue a serviceman isolated behind enemy lines.

⁵ Earl H. Tilford, The United States Air Force Search and Rescue in Southeast Asia. (Washington, D.C.: Center for Air Force History, 1992), 2.

Vietnam, the Beginning

The United States underestimated the will, tenacity, and determination of the North Vietnam regime. North Vietnamese leaders were playing for keeps, believing that the use of any means was justified by their ends. They thought in terms of generations; the longer the war continued, the more persistent they became. Their will to persist was inextinguishable.

General Bruce Palmer Jr.
U. S. Army⁶

Some officers require urging, others require suggestions, very few have to be restrained.

George S. Patton Jr.: *War As I Knew It*, 1947⁷

Fortes fortuna adiuvat. (Fortune favors the brave.)
Terence: *Phormio*, c. 160 B.C.⁸

Geography

The geography of Vietnam is one dominated by the Annamite mountain range that runs southward from North Vietnam, straddling the Laotian border on the west and extending to the South China Sea on the east. These mountains rise to 8,500 feet, are covered with a dense multi-layered jungle canopy and often have limestone outcroppings and spires. Aircrews parachuting into these mountains often died because of injuries sustained from

⁶ Bruce Palmer, Jr., General, The 25-Year War America's Military Role in Vietnam, (Lexington, Kentucky: The University Press of Kentucky, 1984), 175-76.

⁷ Robert D. Heinl, Dictionary of Military and Naval Quotations, (Annapolis, Maryland: U.S. Naval Institute, 1966), 159.

⁸ Heinl, 35.

landing on or hitting the rocks or dense jungle canopy. Helicopter and low flying escort aircraft faced many challenges in the mountains, from rapidly changing weather to insufficient power for the helicopters to hover safely at the higher altitudes. The southern third of South Vietnam consists of flatlands and the Mekong River Delta region. The delta region covers approximately 26,000 square miles of which about one third was cultivated. Further south, the Ca Mu Peninsula is covered by jungle and mangrove swamps.⁹ The varying terrain and demographic environments that made up South Vietnam and its neighboring South East Asian states provided unique challenges for the early rescue forces.

Southeast Asia, 1961-1964

During the period 1961 through 1963, doctrinal considerations made it difficult to identify a role for the United States Air Force (USAF) Air-Rescue-Service (ARS). In 1958, Headquarters, USAF withdrew the wartime mission clause from the National Search and Rescue (SAR) plan and substituted a precept whereby "wartime SAR" became an extension of peacetime operations. The ARS adopted a standardized approach to SAR consistent with the global

⁹ Tilford, 35-36.

concept of the Strategic Air Command. With no official wartime mission, the ARS did very little planning for a combat role.¹⁰ This lack of a wartime mission would haunt the ARS during the early years of the conflict, 1961 through 1964. It would be apparent the new generation of ARS crews would lack the experiences of the Korean War and would have to learn all of the hard lessons again.

In March 1961, President Kennedy directed certain actions be taken in South East Asia, specifically Laos, to demonstrate American resolve to the Soviet Union. The requirement for a combat rescue capability increased as the U. S. sent reconnaissance and other combat aircraft to Thailand while North Vietnam moved more anti-aircraft weapons on to the Laotian Plain of Jars.¹¹

Subsequently, in December 1961 President Kennedy authorized the deployment of a USAF search and rescue unit to South Vietnam. It was inevitable U.S. air activity over South Vietnam would continue to increase and much of the activity would involve combat missions.¹² In United States Air Force Search and Rescue in South East Asia, Earl Tilford raises two serious questions. First, were USAF planners remiss in not securing adequate search and rescue

¹⁰ Earl H. Tilford Jr., The United States Air Force Search and rescue in Southeast Asia, (Washington, D.C.: Center for Air Force History, 1992), 34.

¹¹ Tilford, 34.

for Vietnam operations prior to the commitment of American units? Second, did these planners take into consideration that throughout South East Asia several factors (political, technological, and doctrinal) would complicate the early campaigns for the SAR forces brought into theater to support combat air operations?

The early USAF operation in South East Asia, code name "Farm Gate," was a semi-covert and politically sensitive operation. The operation was publicized as a mission to train South Vietnamese pilots. If "Farm Gate" was a training mission, there would then be little chance for U.S. aircrews to be placed in a situation to be shot-down. Therefore, the presence of search and rescue forces with resources and capabilities greater than normal base SAR would potentially advertise the existence of air operations with a higher casualty potential.¹³

The SAR helicopters of the early 1960s, primarily the HH-43 "Husky", were not suited for operations in the jungles and mountains of South East Asia. The HH-43 had been procured to conduct peacetime state-side base SAR and assist in firefighting operations. Conducting the demanding mission of search and rescue under combat

¹² Tilford, 37.

¹³ Tilford, 37.

conditions in South East Asia was beyond the capability of these initial aircraft and aircrews. Additionally, the changing missions and roles of the USAF in the 1950s coupled with the reduction of helicopter forces limited fiscal resources, and the removal of wartime SAR from their mission had a detrimental effect on the ARS.¹⁴

Search and Rescue Doctrine, 1961-1964

The doctrinal issues that faced U. S. search and rescue operations in South East Asia during the early 1960s were primarily based on roles and missions. The USAF ARS did not have a wartime SAR mission, but some personnel within the organization understood the need for a dedicated war-time SAR force. Unfortunately, they were a minority. The ARS leadership was not convinced there was a legitimate need for the ARS to respond to this emerging mission requirement. Also, the majority of helicopters in theater from 1962 through 1964 belonged to the U. S. Army. Throughout these years the U. S. Army and Marine Corps agreed to assist the USAF detachment that manned the Air Rescue Center at Tan Son Nhut Air Base, operating there since 1962. The agreement was that the USAF would coordinate the rescue missions and the Army and Marine

¹⁴ Tilford, 37-38.

Corps would provide the helicopters and aircrews for the rescue missions. What kept this arrangement from succeeding was doctrine. Neither the Army nor the Marine Corp saw war-time SAR as one of their mission areas. Therefore, they were neither resourced, manned nor trained for this mission. There are many documented cases of rescue missions failing and survivors or aircrews dying. Three examples of rescue mission failures follow.

In March 1963, an Army OV-1 "Mohawk" reconnaissance aircraft crashed near the top of a 6,000 foot mountain in the Central Highlands. Two Marine H-34 helicopters attempted to land a four man rescue party at the crash site. One of the helicopters, while hovering low over the jungle canopy, attempted to lower a crewman to the crash site. The engine power dropped momentarily, causing the helicopter to settle into the trees and subsequently crash. The following morning another Marine H-34 attempted the same maneuver over the crash site and it also crashed.¹⁵

In November 1963, an Army UH-1 "Huey" pilot lost his bearing as darkness fell and flew into the water off the South Vietnamese fishing village of Nha Trang. All four of the Huey's crew escaped the sinking helicopter and a search immediately ensued. Soon several Army Hueys and an USAF C-

47 were searching the crash sight. The C-47 dropped numerous parachute flares which "lit the night into day." Even though the survivors could see the shore and the aircraft searching for them, they had been displaced from the crash site by the out going tide. They watched in dismay as the circling helicopters formed into a line formation and flew toward the shore. The following morning the co-pilot was found by a fisherman close to the shore. The rest of the crew had perished at sea during the night. In the mission debrief, regarding the question as to why the helicopters had not conducted a thorough search, the local U.S. Army commander decided that since one pilot had lost his bearings and crashed, then others would probably do the same.¹⁶

In another rescue failure, an Army UH-1 flying over the mouth of the Mekong River, in January 1964, was shot down by small arms fire. Four of the six crew members escaped the helicopter before it sank. The four survivors, without flotation devises, treaded water while the wing aircraft made an approach to the survivors. While hovering low over the water, in attempt to pick up the first survivor, the rotor wash of the helicopter drowned the

¹⁵ Tilford, 42.

¹⁶ Tilford, 42-43.

crewman they were trying to rescue. With that crewman dead, the helicopter moved over another. The wing helicopter's crewman had the second survivor by the hand and was pulling him into the helicopter when an Army H-21, circling overhead, radioed instructions to clear the area so life vests could be dropped. The crewman released his grip on the hapless survivor and watched him fall back into the river and not surface again. The other two men were rescued.¹⁷ These rescue attempts did not fail because there was a lack of desire or courage. They failed due to a lack of understanding of the complexities of the mission, no standardized procedures, and a lack of dedicated resources. From the earliest days of the air war in Southeast Asia, it was apparent that search and rescue operations had to be timely and well organized if they were to succeed.¹⁸

Air War Transition, 1964

As the air war over Laos intensified during the summer of 1964, President Johnson was faced with the problem of USAF pilots flying from bases in Thailand, conducting combat support missions over Laos, being shot down and captured by enemy forces. In June 1964, the government of

¹⁷ Tilford, 43.

¹⁸ Tilford, 37-52.

Thailand granted permission for U.S. military aircraft based in Thailand to support search and rescue missions in Laos. When the first USAF HH-43B aircraft arrived in the Southeast Asia theater, in September 1964, they were directed to northern Thailand to support the escalating air war over Laos.¹⁹ On August 26, the President authorized the use of U. S. piloted T-28s for SAR support missions. In mid-August 1964, following a series of failed CSAR missions in the vicinity of the Laotian Plain of Jars, Ambassador Unger²⁰ requested the State Department allow U. S. piloted T-28s to fly SAR support missions. The Ambassador wanted to be able to offer the pilots conducting the covert air campaign over Laos assurances they would not be abandoned.²¹

Development of Coordinated CSAR

The Southeast Asia conflict saw the development and refinement of modern coordinated search and rescue efforts. Many of these developments became the cornerstones for our current Joint doctrine for search and rescue operations. As previously noted, during the early covert air operations in Southeast Asia, the political implications of conducting major SAR efforts would bring undue attention to the

¹⁹ Tilford, 50-51.

²⁰ Ambassador Unger was the American ambassador to Laos.

²¹ Tilford, 53.

ongoing covert air campaign. These political implications restricted the ability of the ARS rescue controllers operating from the Air Operations Center at Tan Son Nhut Airbase. The ARS had modified several types of long-range cargo and amphibious aircraft for command and control of world wide SAR missions during the 1950s to support growing USAF commitments. These aircraft and crews acted as search platforms as well as airborne mission coordinators. Throughout the early years of the Southeast Asia conflict, it was apparent to the ARS that 1950s vintage command and control aircraft were inefficient. They were considered the weak link in airborne search and rescue mission capability being developed in the mid-1960s. This was evident in the Douglas SC-54 "Rescuemaster", a modified version of the C-54, that entered service with the ARS in October 1955. Even though the SC-54 had auxiliary fuel tanks which enabled flights of 18 hours, and was fully pressurized, allowing flight over most anti-aircraft artillery, it was not suited for the demanding CSAR mission. The SC-54 had been designed to conduct global search and rescue in support of USAF long-range bombers. The SC-54 had been fitted with a command and control console designed for peacetime SAR and space vehicle recovery. The aircraft also lacked the latest

communications equipment necessary to effectively control the diverse elements of a CSAR task force.²² As a result of these inefficiencies, the USAF modified several C-130s to conduct this specialized and demanding mission. In late 1965, the first two HC-130H aircraft arrived in theater to assume the role and mission of the CSAR task force airborne mission coordinator.²³

The first large scale coordinated SAR effort of the conflict in Southeast Asia took place in November 1964 and involved aircraft from the U. S. Air Force, Navy, and Air America.²⁴ During a reconnaissance escort mission, a USAF F-100 was shot down, at mid-day, over central Laos. Before nightfall temporarily ended the rescue effort, the USAF H-16 "Albatross" control ship was coordinating thirteen F105s, eight F-100s, six Navy A-1Es, two ARS HH-43s, and two Air America H-34s. The coordination and control of these aircraft provided a preview of SAR missions that would be conducted over the next decade in Southeast Asia.²⁵

By 1965 the ARS had developed and was employing standard operating procedures (SOP) in the Southeast Asia

²² Tilford, 64.

²³ Tilford, 76.

²⁴ Air America, was an air transportation company with government contracts, to fly men and material throughout Southeast Asia. These aircraft, even though flown by civilians were available to fly search and rescue missions. In the Laotian air campaign, Air America crews were often in a better position to conduct search and rescue missions. Two other government contracted air transportation companies; Continental

theater for the recovery of downed aviators in enemy controlled territory. Upon receiving confirmation and validation of a downed aircraft or aviator, the Rescue Control Center would launch a rescue task force. The rescue task force would normally consist of a command and control aircraft for coordinating the rescue mission, two sections of escort aircraft designated "Sandy High" and "Sandy Low", and a section of recovery helicopters. Additional support aircraft could be coordinated on-scene by the airborne mission coordinator as required.²⁶

The Changing Battlefield

Throughout the air conflict over Southeast Asia, the North Vietnamese had been carefully studying U. S. aircraft, the type missions flown, and their tactics. They had concluded helicopters played a significant role in many missions. Consequently, they issued instructions to their field personnel on how to shoot down a helicopter. Darrel Whitcomb highlights published North Vietnamese tactics for shooting down helicopters, instructions on how to capture downed aviators, and procedures for creating a trap to lure in the inevitable CSAR task force.

Air Service and Bird and Son also provided both helicopters and light planes in support of rescue missions over Laos.

²⁵ Tilford, 54.

In attacking aircraft of this type [helicopters], we must aim right at the cockpit compartment where the pilot sits in the nose of the helicopter - and open fire. It contains the controls for the mechanical systems and the fuel tank. [Another] is the hump on the back of the aircraft under the main rotor. That area contains very complex machinery.²⁷

To capture pilots, we must disperse from our position in many directions and quickly and tightly encircle them. This movement must be organized and include tight, 360-degree inner and outer perimeters. After capturing pilots, they must be stripped of radio transmitters, weapons, and documents and immediately taken from the area under guard. When conditions are right, the pilot's radio transmitter and signal flares can be used to lure enemy aircraft into the ambush sites. The element on the outer perimeter fires at the A-1s. The one on the inner perimeter must conceal itself and suddenly open fire when the [helicopter] hovers and drops its rope ladder to rescue the pilot!²⁸

As the conflict continued into the 1970s, advances in both technology and doctrine increased the efficiency of the CSAR mission in the Southeast Asia theater. On the other hand, the enemy's capability to thwart rescue missions was also becoming more efficient and deadly. By 1972, U. S. SAR operations were at their zenith in both capability and efficiency in recovering downed aviators. But one rescue mission in April 1972 highlighted the courage of the rescue forces, their commitment to recovery a downed aviator, and the total vulnerability of airborne rescue on a modern battlefield.

²⁶ Tilford, 94.

Bat 21 Bravo Rescue Mission

The 2 April 1972 mission to recover Bat 21 Bravo, a single downed aviator, south of the demilitarized zone (DMZ) in Quang Tri Province was planned, coordinated and included resources in accordance with current procedures. Although communication was established with Bat 21 Bravo and the task force knew his position, his recovery soon became nearly impossible. Bat 21 Bravo's position was in the middle of a major North Vietnamese Army concentration.²⁹ In fact, the situation was unprecedented in the history of rescue missions. A SAR force had never attempted to extract isolated personnel from the battlefield in the midst of two attacking divisions.³⁰ In the initial stages of the mission, forward air controllers (FAC) and on-scene helicopter crews determined the threat was too great for helicopters to initiate a recovery. On the second day of the Bat 21 Bravo rescue attempt, Nail 38, an OV-10 FAC, was shot down in the vicinity of Bat 21 Bravo, while controlling aircraft in close proximity to Bat 21 Bravo's position. One of the aircrew of the OV-10 survived the

²⁷ Darrel D. Whitcomb, The Rescue of BAT-21, (Annapolis, Maryland: Naval Institute Press, 1998), 59.

²⁸ Whitcomb, 59.

²⁹ On approximately 30 March 1972, three NVA divisions supported by heavy artillery and an anti-aircraft regiment began a major offensive into northern South Vietnam, Quang Tri Province. They were opposed by the 3rd ARVN Division.

shoot down. First Lt. Mark Clark landed and began his own evasion no more than two kilometers from Bat 21 Bravo's place of concealment.³¹ On 7 April a second OV-10 was shot down supporting the rescue mission. The pilot of Covey 282, First Lt. Bruce Walker, survived being shot down.³² Subsequently, over the next twelve days, up to 90 sorties per day would be flown in direct support of the Bat 21 Bravo rescue mission. On the eleventh day, Nail 38 Bravo was rescued by ground forces and after twelve days behind enemy lines Bat 21 Bravo was rescued. The cost had been staggering. Among the soldiers and airmen directly involved in the air rescue mission ten men were killed, two were captured and later released, and one was still evading. Nine aircraft were shot down. Many others were damaged, some so severely they would never fly again. More than eight hundred strike sorties were flown in direct support of the rescue mission. In addition, several members of the ground forces recovery team were injured.³³ A tragic epilogue to this chapter of the search and rescue story occurred on 14 April when Viet Cong soldiers killed the pilot of Covey 282, 1st Lt. Walker. A FAC, who had

³⁰ Whitcomb, 67.

³¹ Whitcomb, 61.

³² Whitcomb, 78.

³³ Whitcomb, 102.

been trying to direct Walker to a better hiding position, witnessed his death at the hands of his pursuers.³⁴

The Bat 21 Bravo rescue mission raised serious operational questions regarding the overall capability of the rescue task force. The failure of the air rescue task force to effect the rescue pointed out the ineffectiveness of daylight air rescue in a high threat environment. The battlefield into which Bat 21 Bravo was shot down had a high concentration of enemy forces conducting offensive operations. They were supported by radar and non-radar controlled anti-aircraft guns and radar guided surface-to-air missiles. It was apparent the ARS had no doctrine that provided guidelines to commanders as to when a downed aviator could not be rescued because the cost was too high. In reality, any rescue is possible as long as the appropriate amount of force can be brought to bear in a combined and coordinated operation. But to effect the rescue of Bat 21 Bravo, a seventeen miles radius no-fire zone was established around Bat 21 Bravo in order to allow him to continue to evade. Even with a no-fire zone established, and tactical air (TACAIR) sorties in the area supporting the recovery operation, the 3rd ARVN Division was unable to check the North Vietnamese offensive. Their

³⁴ Whitcomb, 106.

inability to stop the North Vietnamese forces was due primarily to the establishment of the no-fire zone around the downed aircrew and the re-allocation of TACAIR sorties from supporting the 3rd ARVN Division to supporting the CSAR operation. Maj. David A. Brookbank, a USAF air liaison officer with the 3rd ARVN reported, "The SAR restriction gave the enemy an opportunity unprecedented in the annals of warfare, to advance at will."³⁵

The Aftermath of the Bat 21 Bravo Rescue

Toward the end of the Bat 21 Bravo SAR operation, the SAR organization coordinating the effort began to look at the mission very pragmatically. For the first time questions were being asked: How high a price are we willing to pay for these two isolated men? The price had become too great. The entire chain of command, to include MGen Marshal, Vice Commander of Seventh Air Force, was in agreement.³⁶ The operation to rescue the two men would have been terminated, if a second course of action had not been recommended, namely, to conduct a ground force extraction of the two isolated men.

³⁵ Tilford, 119.

³⁶ Whitcomb, 148.

Shortly after the conclusion of the Bat 21 Bravo rescue mission, Col. Muirhead of the 3rd ARRG made the following observations:

- If necessary, the survivor may be instructed to evade to a given location.
- A no-fire zone around a survivor on a conventional battlefield was not pragmatic.
- Understand and accept the limitations of air rescue and pursue other methods of extraction as necessary.
- Rescue attempts could no longer be automatic; efforts had to be based on the threat and location analysis.
- Enemy air defenses are at a level to challenge the U. S. for air superiority and air superiority was required to conduct SAR.³⁷

Additionally, Col. Muirhead determined and briefed to all U.S. air units based in Southeast Asia in the summer of 1972, that if an aviator had a successful ejection and could make radio contact with friendly forces, he had an 82-percent chance of being rescued by SAR forces.³⁸

By 1972, the perspective of American aviators engaged in the war was that the war raging on the ground was irrelevant and questionable in nature and value. The exception was CSAR, which had become one of the most meaningful air missions in the air war over Southeast Asia. It was firepower and equipment with a purpose, an

³⁷ Whitcomb, 151.

³⁸ Whitcomb, 151.

expression of the American way of war, and it brought many isolated Americans home.³⁹

³⁹ Whitcomb, 141.

An American Way of War

It has to make an American fighting man real proud to know that our government and our military will go to any length to save a fighting man's life.

Lt. Col. Iceal "Gene" Hambleton
Bat 21 Bravo⁴⁰

Morale is a state of mind. It is steadfastness and courage and hope. It is confidence and zeal and loyalty. It is élan, esprit de corps and determination. It is staying power, the spirit that endures to the end—the will to win. With it all things are possible, without it everything else, planning, preparation, production, count for naught.

George C. Marshall: Address at
Trinity College, Hartford,
Connecticut, 15 June 1941⁴¹

The Culminating Point

An analysis of the operational effectiveness and cost benefit of personnel recovery operations in the Southeast Asia conflict is beyond the scope of this paper. But a topic worth examining is: To what level of obligation should a commander compel his rescue forces to execute a mission. What price is he willing to pay? What is the culminating point in the recovery of isolated personnel under duress and requiring extraction?

Had the U. S. rescue forces reached such a culminating point in Southeast Asia prior to the conflict's conclusion? During the Southeast Asia conflict there were neither

⁴⁰ Darrel D. Whitcomb, The Rescue of BAT-21, (Annapolis, Maryland: Naval Institute Press, 1998), 149

formal procedures nor a formula that provided rescue force commanders or regional service force commanders guidance in determining when a rescue was possible and when a rescue would potentially be too costly.

It was not until 1972 that the rescue forces were faced with an unprecedented loss of life and resources in their own forces. Within the rescue organization they had not been forced to confront the question of how much were they willing to commit, to pay, in order to recover isolated personnel? Rescue forces conducted most missions based on the quick reaction of the rescue task force and the high degree of experience and dedication of its personnel.

The question was asked within the command structure of the air rescue forces, including the vice commander of the Seventh Air Force, whether there was a limit on the loss of resources and manpower in the recovery of isolated personnel. A limit was based on the actual capabilities of a rescue task force in 1972 when the air war was, to a greater extent, being conducted over North Vietnam. Over North Vietnam, U. S. forces only had limited air superiority. The North Vietnamese air defenses were

⁴¹ Robert D. Heinl, Dictionary of Military and Naval Quotations (Annapolis, Maryland: U.S. Naval Institute, 1966), 196

numerous and becoming increasingly more effective and lethal against both high and low altitude aircraft. Commanders were now realizing that their ability to effect the rescue of a downed airman was directly related to the rescue task forces' limited capability to operate in a high threat environment. It was a hard realization for the organization to accept. The conclusion was based on two factors. First, the conflict was changing from a ground war with heavy U. S. involvement to less U. S. ground involvement and an increase in the air war over North Vietnam. Second, the lethality of the North Vietnamese air defense capability was increasing exponentially, coupled with the inability of the rescue task force to effectively operate in this environment. The conclusions directly challenged the foundation of the intense commitment of loyalty and obligation that the rescue force personnel felt about their mission and the connection with the other combat aviators flying over Southeast Asia. To all aviators, especially those in the South East Asia theater, the objective of CSAR was clear, understood by all, and easily measurable. Furthermore, it appealed to the military as well as the public on a human level--one man assisting another.⁴²

⁴² Darrel D. Whitcomb, "Combat Search and Rescue a Longer Look," Aerospace Power Journal, Summer

Up until 1972, U. S. rescue forces had benefited from the ability to conduct rescue missions based on immediate reaction vice conducting a deliberately planned mission. Having to delay the recovery of a downed aircrew in order to plan and coordinate a deliberate mission was a significant shift in both the operational methodology of executing a mission and the attitude of the rescue force personnel. Prior to 1972 much of the success enjoyed by the CSAR forces was based on quick response, not allowing the enemy time to locate the survivor or to set an ambush for the recovery force.

A culminating point had been reached. In the face of increasing lethality of enemy air defenses and an increase in enemy conventional ground forces, the rescue forces were faced with a greater total number of rescue missions, with many in a higher threat environment. In order to maximize their effort and preserve valuable and limited rescue resources, the rescue organization was forced to move towards evaluating the probable success of rescue missions prior to conducting them.

An American Way of War

In order to further understand why CSAR is an important part of our war fighting ability, it is useful to examine the way America fights its wars and examine this approach in relation to CSAR. The concept of developing specialized forces to rescue isolated personnel has grown from three circumstances. First, the traditional belief in the sanctity of human life. Because of this dedication to the preservation of life, the U.S. military has made extensive efforts to protect the lives of fighting men since the outbreak of the Second World War. Second, the expense of training aircrews for the U. S. Armed Forces is very high in money and time to produce an experienced aviator. As these aircrews gain further experience, their value to their service greatly increases. Finally, throughout the history of aerial combat since World War II, those who fly have performed their duties more efficiently knowing that every effort will be made to affect their rescue if they are shot down.⁴³

In order to define the American way of war, one must first have an understanding of our [American] value system, the national fabric of our society. Anthony Hartle states

in Moral Issues in Military Decision Making, that there are two concepts which dominate the values of American society, freedom and democracy. These concepts are entwined in two lesser concepts, equality and individualism. In Hartle's discussion of freedom, he states,

...the protection of freedom was the overriding consideration in creating the Constitution; and throughout our national history, we have maintained that freedom and preservation of democracy are the only causes justifying the use of our armed forces.⁴⁴

As Americans, we have been taught that freedom within our nation is freedom to live our lives as we choose and within the laws defined by society. Our government and its institutions are designed to protect our personal freedom and autonomy.

A Military Heritage

As American service members we learn from our 225 year military heritage, which has been well documented and is taught to us throughout our lives and military careers. Much of this heritage is based on the experiences, victories, and failures of our fore-fathers. Vice Admiral James Stockdale, USN (Ret.) wrote in an article, "Experiences as a POW in Vietnam" about the virtues that

⁴³ Tilford, 2-3.

⁴⁴ Anthony E. Hartle, Moral Issues in Military Decision Making (Lawrence, Kansas: University Press of Kansas, 1989), 89.

carried him and his fellow POWs through their own personal and shared ordeals. He closed his article with the following, which epitomizes why their experiences have become part of our heritage and our way of warfighting.

In our effort to survive and return with honor, we drew on the totality of our American heritage. We hope we added something to that heritage. God forbid that it should ever happen to other Americans—to your sons and grandsons, and mine—but if it does, we pray that our experience will be known to them and give them heart and hope they will need.⁴⁵

Clausewitz believed that moral issues could affect a nation's ability to conduct war. He stated, "The passions that are to be kindled in war must already be inherent in the people..."⁴⁶ In our democratic society, the morals of the American people will have a great effect on the ability of the government to involve the nation in a conflict or war. Regarding morals and war, Clausewitz stated,

...the moral elements are among the most important in war. They constitute the spirit that permeates war as a whole, and at an early stage they establish a close affinity with the will that moves and leads the whole mass of force, practically merging with it, since the will is itself a moral quantity. ... The spirit and other moral qualities of an army, a general or a government, the temper of the population.... They can

⁴⁵ James B. Stockdale RADM, USN, "Experiences as a POW in Vietnam," Naval War College Review, January-February 1974, 6.

⁴⁶ Clausewitz, 89.

moreover influence our objective and situation in very different ways.⁴⁷

In his discussion on justifying military decisions and necessity, Anthony Hartle states, "Necessity at the highest level of national affairs is seldom the direct concern of the military professional; that responsibility lies with the national leadership."⁴⁸ He also defines necessity in terms of "moral justification," which is much closer to the decision-making process of the military professional engaged in military operations.

Insofar as moral justification is concerned, actions that are taken in the name of necessity are taken on the authority of the state. In such cases, justification of actions must be in the terms of the fundamental values of the society concerned, or the moral reasoning will indeed be incoherent. If the society is to be consistent, ultimate justification is clearly not a function of national security interests alone; rather it is a function of the value system of the society. Ultimate justification must be moral, not legal or merely expedient. If it is consistent, such reasoning will provide rational justification for moral choices.⁴⁹

This decision making process is critical in understanding why American warfighters, specifically rescue force personnel, will commit themselves to a rescue mission with such dedication. For many within the rescue organization, the commitment and high risks associated with the mission

⁴⁷ Clausewitz, 184.

⁴⁸ Hartle, 108.

⁴⁹ Hartle, 108.

were justified by the notion that "they did it for one another."⁵⁰

Virtues and Traits of Character

Throughout the duration of the air war over Southeast Asia, the personnel engaged in executing rescue missions developed a code of honor, deeply rooted in the values of obligation and sacrifice. These values can be traced back into the ideals of American society as well as U. S. military ethics. Whether it was known to rescue force personnel or not, the act of conducting a rescue mission, regardless if the survivor was rescued or not, had an influence that reached beyond themselves and affected the morale of their fellow service members, outside of their organization, to even a greater extent. Most specifically, they affected the aircrews who flew missions over Southeast Asia. These crews knew that if shot-down, and regardless of the situation, rescue forces would work as hard as physically possible and take significant risk to facilitate their recovery. Richard Gabriel discusses these values in To Serve With Honor. He relates values to virtues and

⁵⁰ Whitcomb, 141.

points out that a soldier's virtues or character are not ethics and those virtues are not innate but must be acquired by teaching and practice. He goes on to state, "They [virtues] are also traits of character rather than traits of personality, and they are stable and not simply transitory feelings that a person may acquire at a certain time."⁵¹ We can associate these "learned and practiced traits of character" to the rescue forces operating in Southeast Asia. Their commitment and loyalty to their fellow service members was ingrained through shared experiences and expertise in the conduct their mission. Gabriel defines two primary virtues that speak volumes about the character of the rescue force personnel:

Sacrifice - As harsh (or idealistic) as it sounds, the truth is that the soldier may legitimately be asked and required to make the ultimate sacrifice of his own life in the observance of his professional obligations. Sacrifice is a noble virtue when it is done for values that are worthwhile.⁵²

Obligation - Obligation has to do with action, not behavior. Along the same lines obligations imply ability. A fundamental proposition of any ethical theory and the moral judgments that it makes about men's actions is summarized in the axiom "ought implies can." There can be no basis for judging actions as moral or immoral when the ability to perform, or indeed not to perform, the judged action is absent. Obligations are morally binding only when it is possible to execute them. ...If one is going to

⁵¹ Richard A. Gabriel, *To Serve With Honor*, (Westport, Connecticut: Greenwood Press, 1982), 151.

⁵² Gabriel, 160.

impose a number of ethical obligations on members of a profession, the members must be aware of them and have the clear ability to perform them.⁵³

The Necessity of CSAR

On a wider view of justifying the use of our armed forces we must include the notion of national interests. In P. H. Liotta's article "To Die For: National Interests and the Strategic Uncertainties" he states that "the bottom-line" regarding national interests "remains unchanged: what a nation wants and what its citizens are willing to war over—and to die for—remain unchanged as fundamental interests."⁵⁴

Today, just as during the conflicts with American involvement over the past 50 years, there is a necessity to recover isolated personnel during conflict. Our ability to succeed or fail to conduct a combat rescue has both political and military implications that range from the tactical to strategic level. The American public's concern over casualties can intensify a situation that involves even one American life into a major crisis.⁵⁵ Therefore, a commander must be able to do everything militarily and

⁵³ Gabriel, 30.

⁵⁴ P. H. Liotta, "To Die For: National Interests and Strategic Uncertainties," Parameters, U.S. Army War College Review, Summer 2000, 47.

⁵⁵ James E. Moetmann, Edward E. Holland and Gary A. Wolver, "Joint Combat Search and Rescue – Operational Necessity or Afterthought?" Joint Forces Quarterly, Spring 1998, 44.

humanly possible to effect the rescue of isolated personnel. Supporting the commander's need to conduct a rescue is the dedication of his rescue organization. Values, beliefs, military heritage, and experience will ensure that there will be American service members willing to accept the risks and are capable of executing the mission.

Operations Today and Tomorrow

An army should be ready, every day, every night, and at all times of the day and night, to give all the resistance of which it is capable. . .The soldier should always be furnished completely with arms and ammunition; the infantry should never be without its artillery, its cavalry, and its generals; and the different divisions of the army should be constantly ready to support, to be supported, and to protect themselves.

Napoleon I: Maxims of War, 1831

CSAR Operations Today

Combat search and rescue (CSAR) encompasses reporting, locating, identifying, recovering, and returning isolated personnel to the control of friendly forces in the face of actual or potential resistance. CSAR is one of the more complex methods of personnel recovery because it requires synchronization of forces and elements that may never have operated together in the face of a hostile threat. CSAR operations are further complicated by having to operate at significant distances beyond areas controlled by friendly forces. Whereas most facets of combat operations target specific enemy resources in a land, air, or maritime environment, and are normally proactive in nature, reaction is intrinsic to CSAR operations.⁵⁶

⁵⁶ Joint Tactics, Techniques, and Procedures for Combat Search and Rescue, Joint Pub 3-50.21, I-1.

Doctrine for CSAR in the U. S. armed forces has evolved from the experiences of the Southeast Asia conflict and the twenty-five years since the end of that conflict. Even though there are many documented cases of personnel being recovered by search and rescue forces since the early days of the Second World War, the genesis of current CSAR responsibilities, organization, and doctrine was the Southeast Asia conflict.

Responsibility for CSAR is stated in Doctrine for Joint Combat search and Rescue, Joint Pub 5-50.2 as each Service and United States Special Operations Command (USSOCOM) is responsible for performing combat search and rescue in support of their own operations, consistent with their assigned functions.⁵⁷

In a joint operation under the command of a joint force commander (JFC), Joint Pub 3-50.2 delineates the JFC's responsibility for CSAR, "The JFCs have primary authority and responsibility for CSAR in support of U. S. forces within their areas of responsibility (AOR) or joint operations area (JOA)."⁵⁸ The JFC can delegate the responsibility to recover personnel to joint force component commanders. In addition, the JFC should

⁵⁷ Doctrine for Joint Search and Rescue, Joint Pub 3-50.2, 1-1.

⁵⁸ Joint Pub 3-50.2, 1-1.

establish a joint search and rescue center (JSRC) to monitor rescue efforts. The JFC may choose to retain command and establish the JSRC within his staff. Once established, the JSRC should plan, coordinate and execute joint SAR and CSAR operations, and also integrate CSAR operations with other recovery operations within the area assigned the JFC. If there is significant involvement by component commanders and their staffs, the JFC should task one of the component commanders to designate their component rescue coordination center (RCC)⁵⁹ to function as the JSRC.⁶⁰

The search and rescue centers are defined in the following manner:

Joint Force Commanders

- Joint Search and Rescue Centers (JSRC): Plans, coordinates, and executes joint search and rescue operations within the geographical area assigned to the joint force.

⁵⁹ See Appendix A, Figures A-1, A-2.

⁶⁰ Joint Pub 3-50.2, 1-1.

Component Commanders

- Rescue Coordination Center (RCC): Coordinates all component combat search and rescue activities including coordination with the joint search and rescue center and other component RCCs.⁶¹

A SAR or CSAR operation would be considered a joint operation when that operation has exceeded the capabilities of the component commander and requires the efforts of two or more components of the joint force to accomplish the mission. The planning, coordinating, and executing CSAR operations transcends component functional responsibilities and organizational boundaries, and requires a common framework to integrate the many types of forces which are capable and may be tasked to participate in or support CSAR operations.⁶²

When the recovery of isolated personnel is required, the typical sequence of events for the component RCC and joint force JSRC is as follows:

⁶¹ Joint Pub 3-50.2, 1-3.

⁶² Joint Tactics, Techniques, and Procedures for Combat Search and Rescue, Joint Pub 3-50.21, I-1.

Component Rescue Coordination Center (RCC)

- Assumes duties as CSAR mission coordinator initially and reports the incident to the JSRC.
- Initiates CSAR planning.
- Receives intelligence briefing to determine area threat.
- Designates an isolated personnel report (ISOPREP) control point and obtains ISOPREP data and evasion plan of action (EPA) from units.
- Tasks subordinate CSAR-capable forces and coordinates with the JSRC and the requesting unit.
- Requests additional recovery forces through the JSRC if component CSAR resources are inadequate or insufficient.
- Informs the JSRC if component resources will execute the CSAR mission.

Joint Search and Rescue Center

- Coordinates JFC tasking of other components RCCs to execute CSAR missions when notified that a component RCC is unable to do or requires support.
- Coordinates with component commands for use of non-dedicated CSAR resources when appropriate.

- Coordinates for use of special operations forces (SOF) with the operations section (J-3) and the joint forces special operations command (JFSOC) component as appropriate.
- Coordinates the development of a CSAR task force (CSARTF) with component CSAR controllers when appropriate.
- Coordinates with the intelligence section (J-2) and/or the special operations component to alert evasion & recovery (E&R) nets, where established and activated, to assist isolated personnel.
- Determines if current operations will provide temporary air superiority in the vicinity of the isolated personnel, resulting in collateral support of the CSAR effort.⁶³

The methods of recovery of isolated personnel that are generally used by U. S. armed forces are:

Combat Search and Rescue Task Force - This method of recovery, used previously in South East Asia, has severe limitations when facing a significant air

threat but may be used where resources and enemy activity allow. CSARTF elements can help the recovery vehicle by pinpointing the location and authenticating isolated personnel, protecting isolated personnel and the recovery vehicle. The CSARTF is coordinated through pre-mission planning and briefings with all participating elements.⁶⁴

Single Unit - The method employs a single type of vehicle, normally a section (flight of two) of helicopters, to penetrate hostile or denied territory without support of a CSARTF. This recovery method requires knowledge of the exact location of isolated personnel. The recovery vehicle's defense is accomplished by remaining undetected through the use of terrain masking, darkness, or adverse weather as cover rather than the use of firepower. This mission should be planned and executed with communications silent or emission control as required. Thorough preparation, including exhaustive navigation planning and threat analysis, is the key to success. The single unit recovery is the preferred method of

⁶³ Joint Pub 3-50.2, II-1,2.

⁶⁴ Joint Pub 3-50.2, II-6,7.

recovery, but terrain, enemy activity, and lighting conditions may suggest using the CSARTF method.⁶⁵

Low Visibility Options - The general concept of employing clandestine specialized teams and SOF in recovery operations is to place a highly trained unit in company with isolated personnel as soon as possible and move them to an area of friendly control.⁶⁶

Current and Future CSAR Capabilities

The Navy's current CSAR capability has been affected by the draw-downs in the Department of Defense over the past decade. The reductions in carrier battle groups (CVBGs) and increase in operational tempo have affected the Navy's rescue forces. Today, CVBGs bring the CINCs a limited CSAR capability. This limitation is based on the number of CSAR assets with which the carrier airwing (CVW) deploys. With only two HH-60H aircraft, the Navy's primary CSAR recovery vehicle, in a deploying CVW, attempting to conduct a two aircraft mission with only two over-land recovery assets is operationally inefficient. The Navy has the ability to conduct an immediate CSAR, in support of

⁶⁵ Joint Pub 3-50.2, II-6.

⁶⁶ Joint Pub 3-50.2, II-9.

real world operations, but possesses limited depth in its ability to conduct sustained CSAR operations over-land. The Navy is currently limited by helicopter resources, not doctrine or aircrew capability.

In the event of establishing a JTF, the lack of Navy CSAR helicopter resources may impact the Naval component commander's ability to effectively support both the CSAR requirements of the Navy's strike missions and CSAR mission tasking from the JSRC. Unless joint doctrine states to what level of resources and effort the component commanders will support JSRC mission tasking, then the joint mission will be regarded as secondary to component mission requirements. This could eventually delegate the joint CSAR mission to a single service as the primary resource for JSRC mission tasking.

Currently, a CVBG operating in a joint operating area (JOA) may only have two CSAR capable helicopters. These limited assets would preclude the Navy component commander's ability to concurrently perform CSAR in support of Navy operations and the JSRC. It is very possible that the coordinated efforts of more than one component may be required to successfully rescue isolated personnel.⁶⁷ The geographic CINCs need to encourage the component commanders

to provide sufficient CSAR resources to efficiently and safely support the mission requirements of both the component and the JSRC. Otherwise, the services will only be required to provide the necessary CSAR resources to meet their operational requirements and may not be prepared to meet the dynamic requirements of joint operations.

Limits of Joint Doctrine

Even though joint doctrine clearly states theater CINCs are responsible for CSAR in their AOR, the doctrine does not sufficiently describe the requisite joint capabilities or component responsibilities. The current organization and delegation of responsibility show the theater CINCs must rely on service commanders for support in creating and providing resources for the JSRC.⁶⁷ Current joint doctrine does not provide a rationale or requirement for the services to upgrade and maintain an effective and robust joint CSAR capability. If the services are responsible for "...performing CSAR in support of their own operations, consistent with their assigned functions", this potentially limits the ability of the CINC to provide and employ rapid reaction and overwhelming force as required.⁶⁹

⁶⁷ Joint Pub 3-50.21, I-1.

⁶⁸ See Appendix A, A-3, A-4.

⁶⁹ Moetmann, Holland, Wolver, 47.

This inhibits operations by potentially preventing CSAR assets from conducting pre-mission planning and coordination.

If the JSRC tasks two or more service components within a JTF to provide assets for the recovery of a downed aviator, the geography of the AOR may prevent the assets assigned the mission from properly planning and coordinating prior to mission execution. A recent article in Joint Forces Quarterly argued that stated, "Doctrine should acknowledge that even if service capabilities are not exceeded, pre-planned joint CSAR efforts are practical and appropriate and also merit initial consideration."⁷⁰ Pre-planned joint CSAR efforts would ensure the high degree of planning and coordination required to conduct a joint CSAR operation. The early development of either a single or several joint CSAR team(s) would potentially enhance the ability of conducting an immediate response CSAR mission within the operating area of the joint CSAR team(s). Joint CSAR doctrine states,

An immediate recovery is most desirable because friendly forces may still be in the area, enemy forces may not have had an opportunity to react, and required medical treatment can be rendered quickly.⁷¹

⁷⁰ Moetmann, Holland, Wolver, 47.

⁷¹ Joint Pub 3-50.2, C-4.

Additionally, current doctrine would provide a joint CSAR capability to a service if the service or component commander were to exceed his/her ability to conduct CSAR in support of assigned missions. Again, this makes the joint CSAR option the second option and only if the service component determines that its capability has been exceeded. It is fair to assume that services will plan to provide a CSAR capability for their own missions and not initially request non-component assets in the mission-planning phase. But what may happen is that a service may suddenly have an operational shortfall in its CSAR capability at the eleventh hour and must therefore request assistance from the JSRC at the last minute. If the CSAR mission were to be turned over to the JSRC at this time, there would have been no planning between the add-on joint assets and the remainder of the component combat search and rescue task force (CSARTF). A task force organized on a potentially ad hoc basis would then conduct the mission. Conducting a CSAR mission on an ad hoc basis, in an environment with any threat level, is not prudent and should be discouraged. What was once a planned CSAR response would then be reactive with assets only minimally briefed as to the mission specifics.

Joint doctrine dictates that each geographic CINC develop and promulgate theater CSAR guidance to provide broad and general direction on the level of effort and the conditions under which additional resources within the theater may be committed to a CSAR operation. The guidance would also include standardized evasion and survivor responsibilities and actions when isolated and awaiting rescue.⁷² Component commanders operating in the theater should implement the guidance and supplement it with:

- Basic go or no-go criteria that indicate the conditions and circumstances under which commanders are willing to risk additional assets to conduct a CSAR mission.
- Conditions that require use of CSAR capable resources external to the component or the joint force.⁷³

Coordinating a joint CSAR mission during the initial phases of a CSAR operation when "...timing, decision, and response are critical" is crucial to mission success.⁷⁴

The JFC must be prepared to conduct joint CSAR missions prior to the commencement of hostilities within

⁷² Joint Pub 3-50.2, IV-1.

⁷³ Joint Pub 3-50.2, IV-1.

his AOR. The component commanders must also be prepared to support cross service operations and plan their force structure accordingly.

⁷⁴ Moetmann, Holland, Wolver, 48.

Conclusion

A Way of War

Combat search and rescue is warfighting. CSAR is not a support mission, it is combat. It is forces maneuvering deep into enemy territory, many times covertly, other times through forced entry. Though not desired, often enemy forces are encountered and engaged. The operational experiences and the doctrine, tactics, techniques, and procedures of the current CSAR mission support the notion that CSAR is warfighting.

Search and rescue came of age and earned its title as 'combat search and rescue' in the skies over Southeast Asia in the 1960s and 70s. CSAR is not a 'nice to have' capability, it is a requirement for a nation that relies heavily on decisive air power, precision engagement, and dominant maneuver.

In the air war in Southeast Asia preceding 1964, many operations and missions were covert. Recovery of downed pilots, prior to 1964, basically saved them from death at the hands of their captors and also kept the U. S. affiliation in the conflict at a non-combat level. As U. S. involvement increased and the air war became 'less' covert, the number of aircraft sorties increased, as well

as the number of aircraft shot-down. The need for a robust and responsive SAR capability also increased.

An aspect of the Southeast Asia conflict, which was less a consideration during WWII and Korea, was the increasing presence of the U. S. and international news media. Television reporting of events throughout the theater brought all of the emotions and reality of the battlefield into the homes of the American public. Reporting from the battlefield highlighted the political problems associated with American involvement in the conflict. The most dramatic and emotional reports were the political exploitation of U.S. POWs by the North Vietnamese. During WWII, POWs were sequestered in camps far from the front to remain for the duration of the war. During the Vietnam conflict, the POWs became political pawns, many were mistreated and died in captivity and this now became part of the daily lives of the American public.

As we saw in Southeast Asia, regardless of whether the service members believed in the conflict in which they fought, or if the conflict had any bearing on our national interests or security, U. S. service members continued to risk their lives to save another. This is the American way of war.

If we believe a war or conflict can only be successfully fought if the people support the decisions of the government and the actions of the forces in the field, then I would suggest the armed forces must be capable of effecting the recovery of isolated personnel during combat operations. The lack of a rescue capability will have a detrimental effect on the will and morale of the public and military personnel. The last two major U. S. air campaigns, Desert Storm and Kosovo, have resulted in either a very low or zero loss of American lives. If, in near future conflicts or wars, the CJTF shapes the battlespace by using overwhelming and coordinated air power, the American public will most probably continue to expect minimum to zero casualties and the timely recovery of any downed aircrews.

Warfighting Heritage

When examining the history of CSAR in the U. S. armed forces and the ethical, moral, and emotional factors that transcend this history all the way to current operations there are two primary factors that differentiate CSAR from peacetime SAR. First, when conducting peacetime SAR, survivors of an aircraft mishap or other misfortune hope to be found and rescued quickly. Saving lives is the primary

concern. However, with CSAR, U. S. forces involved in armed conflict or war know that there is a risk of being isolated behind enemy lines. The morale of these forces, aircrew in particular, and their effectiveness in combat operations depends to a significant extent on knowing that every effort will be made to rescue them if they are shot down. Secondly, there are political overtones associated with CSAR. In an era when the American public expects low to zero casualties, the ability of an enemy to use captured service members as human-shields or exploit their capture through the world's news media, is a powerful weapon in its own right. These factors are real and cannot be ignored.

In November 1997 the remains of the crew of "Jolly Green 67", an HH-53 shot down in the Bat 21 Bravo rescue effort in 1972, were buried at Arlington National Cemetery,. Lt Gen David Vesely, USAF, speaking at the ceremony, said, "All of us who have flown in harm's way know what a difference it makes to believe that every effort will be made to rescue us if we are down.... Today while we count the high cost, we should also count ourselves fortunate to be beneficiaries of these, the best

of men--men who gave their lives so 'that others may live.'"⁷⁵

When America prepares for war and enters a conflict the forces brought to the fight are of superior technology and will be employed in overwhelming force. In addition, this force will also bring its belief in certain morals and virtues. Many of these ideas and traits of character are an integral part of America's social and political system. We can associate these traits, which transcend generations and our society's diversity, to two primary virtues, sacrifice and obligation. These virtues are the foundation of the loyalty and commitment American service members feel toward each other and their Nation. Therefore, the role of CSAR can be seen as a further extension and a clear example of the American way of war.

⁷⁵ Darrel D. Whitcomb, "Combat Search and Rescue a Longer Look." Aerospace Power Journal, Summer 2000, 35.

APPENDIX A

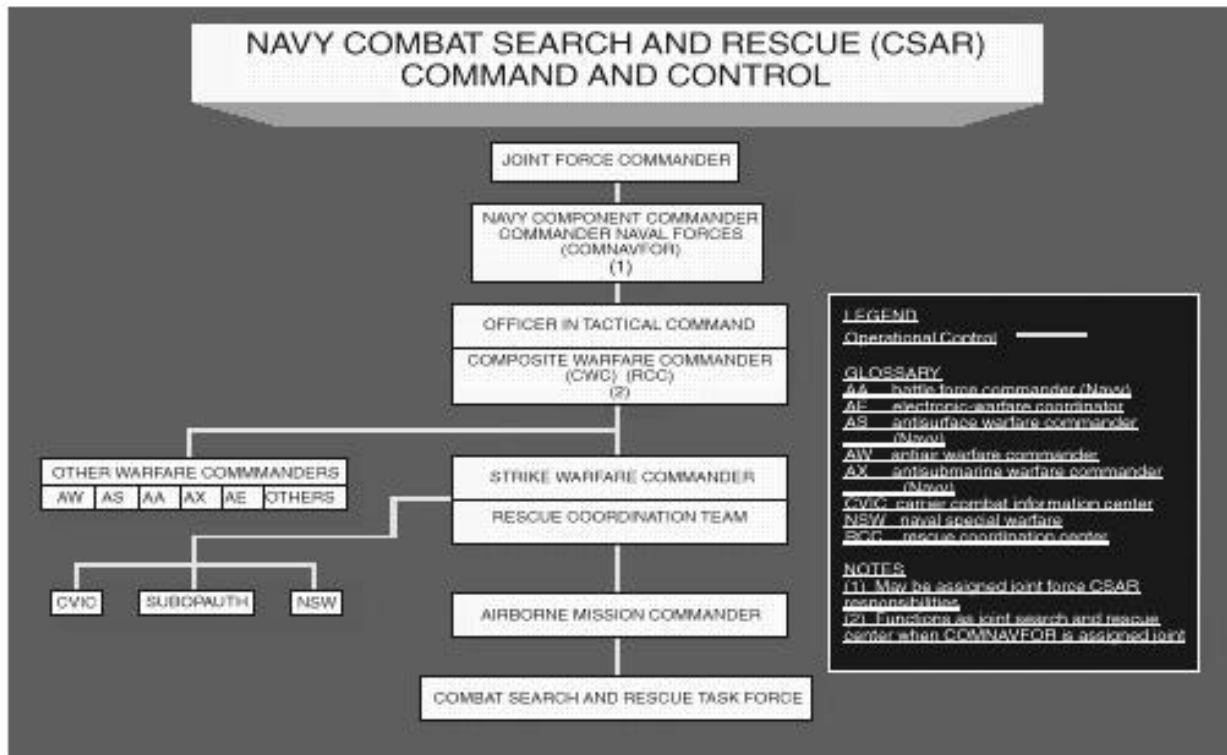


Figure A-1 Navy Combat Search and Rescue Command and Control⁷⁶

⁷⁶Joint Pub 3-50.2, B-5.

APPENDIX A

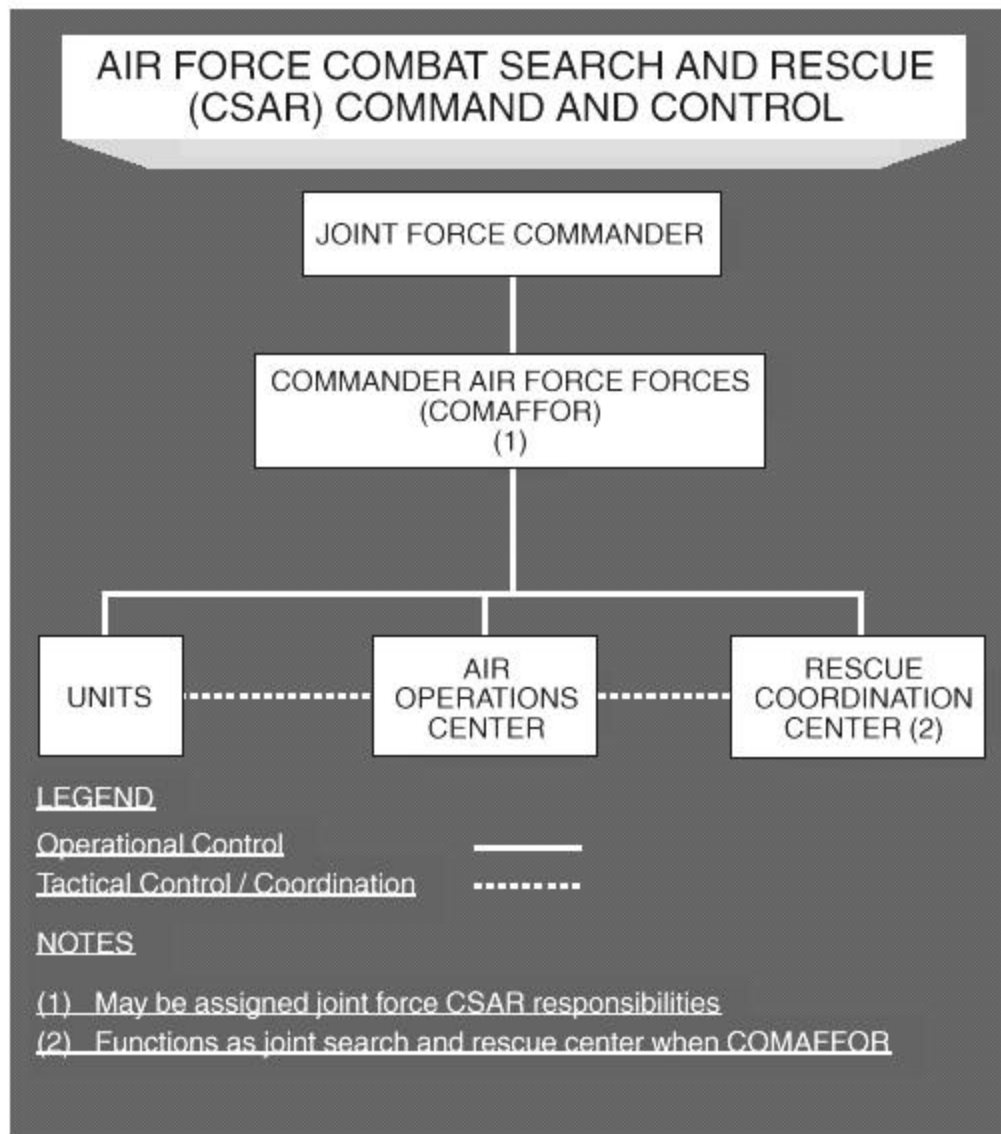


Figure A-2. Air Force Combat Search and Rescue Command and Control⁷⁷

⁷⁷ Joint Pub 3-50.2, D-5.

APPENDIX A

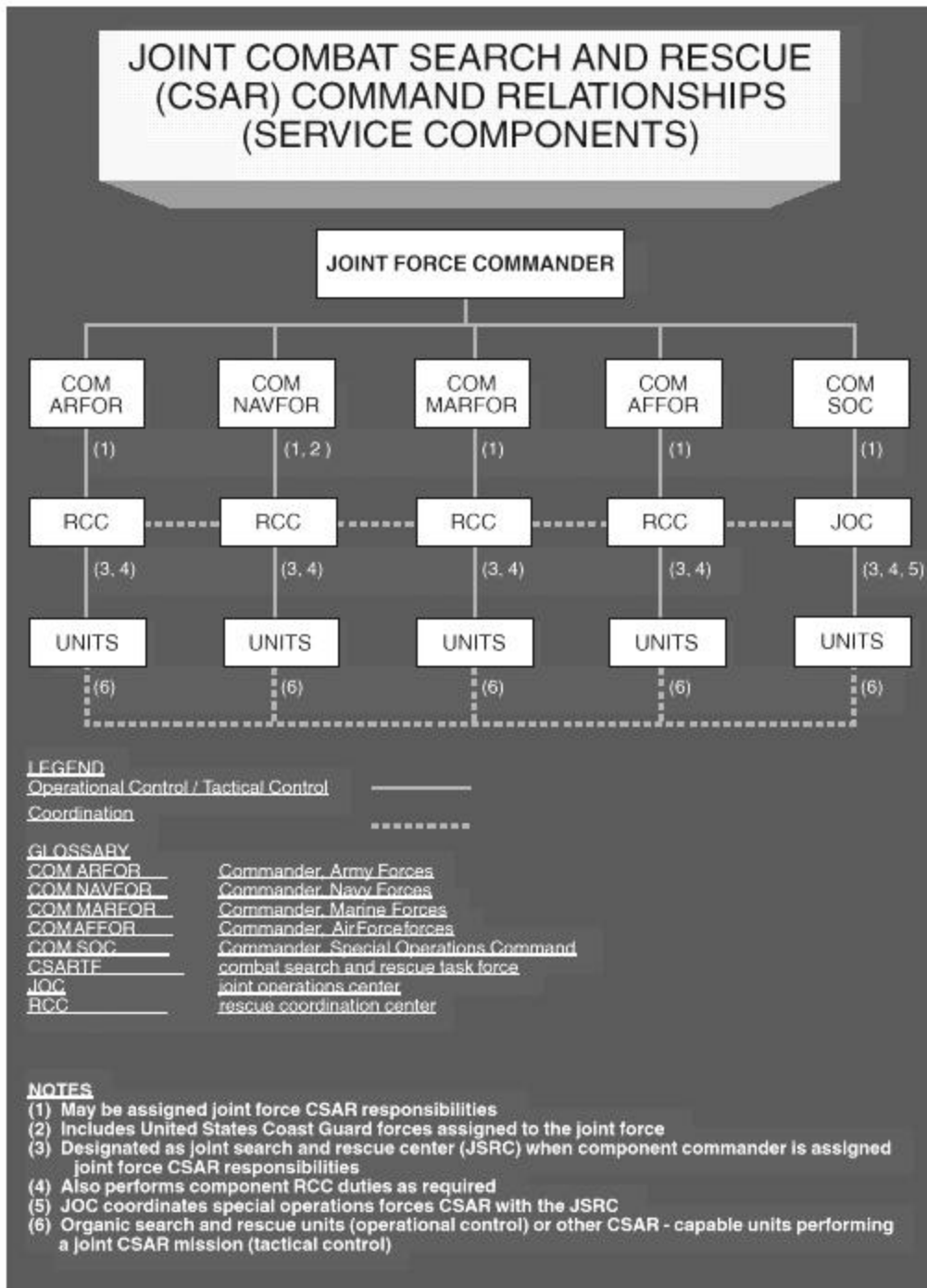


Figure A-3. Joint Combat Search and Rescue Command Relationships (Functional Components)⁷⁸

⁷⁸ Joint Pub 3-50.2, III-3.

APPENDIX A

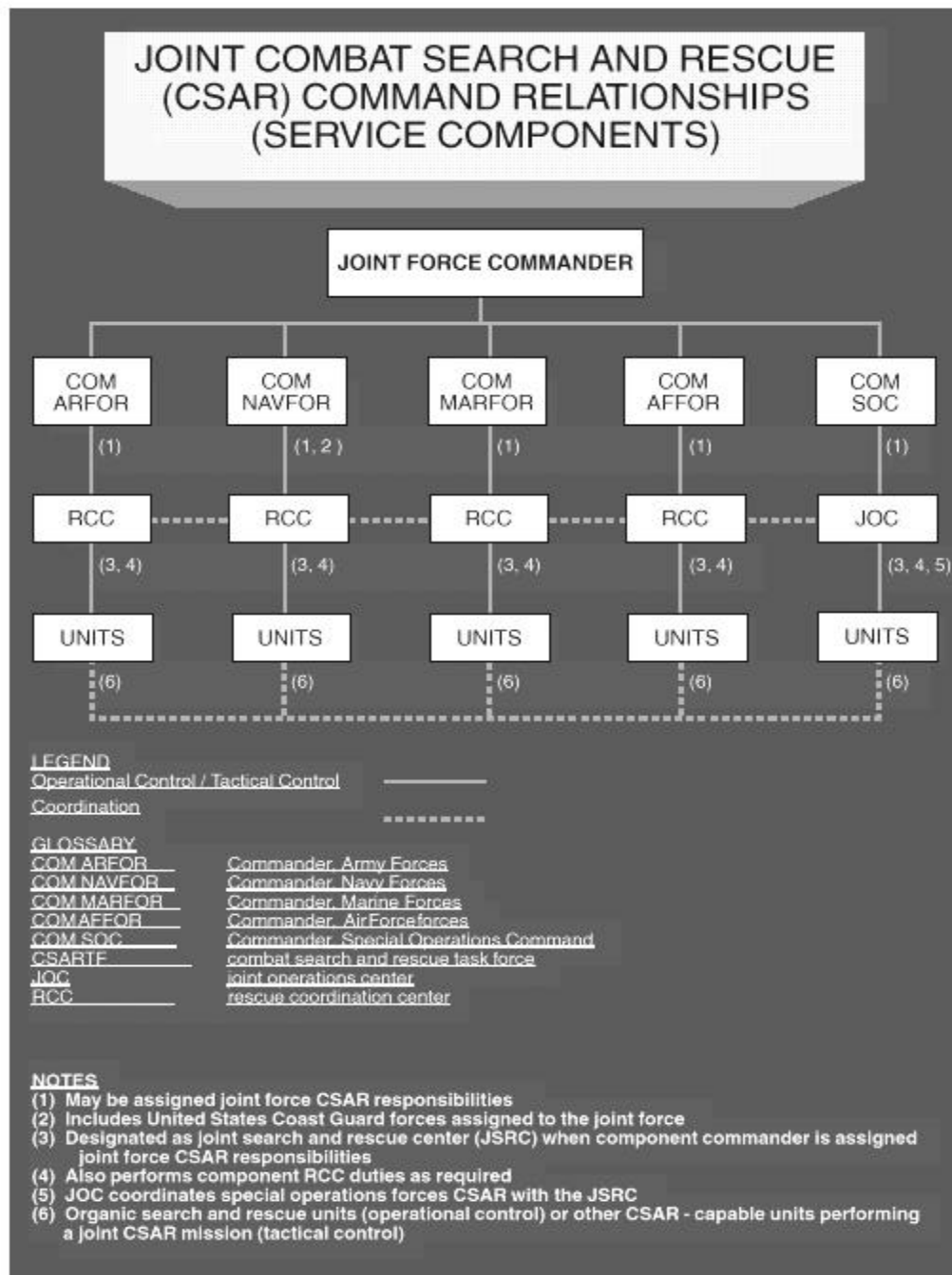


Figure A-4. Joint Combat Search and Rescue Command Relationships (Service Components)⁷⁹

⁷⁹ Joint Pub 3-50.2, III-2.

Bibliography

Bell, Dan Captain, USN. "Do We Still Need Navy CSAR?" letter to editor. Proceedings vol 126/9/1,171 (September 2000): 18,20

Caires, Greg Alan "Advanced Aircraft Bolster Search, Rescue Capability." NDIA's Business Technology Magazine vol 83 no 545 (February 1999): 28-29.

Chavez, Robert M. Capt., USAF "The Ideal Combat Search and Rescue Task Force (CSARTF) - Sandy One's Perspective." USAF Weapons Review vol 48, no. 2 (Summer 2000): 37-44.

Combat Search and Rescue Procedures (Search and Rescue)
NWP 19-2

Doctrine for Joint Combat Search and Rescue. Joint
Publication 3-50.2

Doctrine for Joint Airspace Control in the Combat Zone.
Joint Publication 3-52

Fuqua, Michael T., Captain, USN "We Can Fix Combat SAR in the Navy." Proceedings vol 123/9/1,135 (September 1997): 40-42.

Gabriel, Richard A. To Serve With Honor. Westport, Connecticut: Greenwood Press, 1982.

Hallion, Richard P. Storm Over Iraq Air Power and the Gulf War. Washington, D.C.: Smithsonian Institution Press, 1992.

Hartle, Anthony E. Moral Issues in Military Decision Making. Lawrence, Kansas: University Press of Kansas, 1989.

Hewish, Mark and Janssen, Joris "Pinpoint and pick up: combat search and rescue." Jane's International Defense Review vol no.31 (January 1998): 35-39

Heinl, Robert D. Jr., Colonel, USMC (Ret.) Dictionary of Military and Naval Quotations. Annapolis, Maryland: U.S. Naval Institute, 1966.

Joint Tactics, Techniques, and Procedures for Combat Search and Rescue. Joint Publication 3-50.21

Joint Doctrine for Evasion and Recovery. Joint Publication 3-50.3

Keresey, Dick "Farthest Forward." American Heritage (July / August 1998): 60-73.

Kocks, Kathleen "Search and Rescue's New Direction." Journal of Electronic Defense vol 23 no. 4 (April 2000): 45-50.

Latrash, Fredick, Lieutenant Commander, USN "Reorganizing the Navy Helo Force." Proceedings vol 127/1/1,175 (January 2001): 46-51.

Leahy, Timothy J., *The Future of USAF Combat Search and Rescue*. MS Thesis. Maxwell AFB, Alabama: School of Advanced Airpower Studies, Air University, June 1998.

Lippman, Thomas W., "U.S. Rescues Pilot as NATO Widens Attack, Stealth Fighter Down." *Washington Post*, 28 March 1999, Final Ed., A.

Liotta, P. H. "To Die For: National Interests and Strategic Uncertainties." Parameters, US Army War College Quarterly vol 30, no. 2 (Summer 2000): 46-57.

Meggett, Dave 2Lt, USAF "Organizing for Search and Rescue: Force Structure in a Joint Environment." Airpower Journal vol 9, no. 2 (Summer 1995): 82-88.

Moentmann, James E., Holland, Edward E., Wolver, Gary A. "Joint Combat Search and Rescue - Operational Necessity or Afterthought?" Joint Forces Quarterly no. 18 (Spring 1998): 44-51.

Moschler, Raymond F., Major, USAF "Combat Search and Rescue (CSAR) in the Laser Age." USAF Weapons Review AFRP 11-1 (Winter 1996): 22-24.

Natter, Robert, J. Admiral, USN "Help Keep This the Greatest Navy." Proceedings vol 126/12/1,174 (December 2000): 2-4.

Packett, Virgil L., Lieutenant Colonel, USA, Brooks, Bobby, Captain, USA "Combat Search and Rescue: Whose Responsibility?" US Army Aviation Digest vol 1-92-6 (October 1996): 18-21.

Palmer, Bruce Jr., General, USA, The 25-Year War America's Military Role in Vietnam. Lexington, Kentucky: The University Press of Kentucky, 1984.

Platt, Andrew W. Capt., USAF "Building Combat Search and Rescue (CSAR) Situational Awareness (SA): Intelligence and Alert Sandy/Jolly Operations." USAF Weapons Review vol 48, no. 2 (Summer 2000): 28-36.

Priest, Dana. "NATO Pilots Set to Confront Most Powerful Foe Since Iraq." *Washington Post*, 24 March 1999, Final Ed., A.

Priest, Dan. "'A Huge Sigh of Relief' Pentagon Stands Firm After Mission to Save Flier." *Washington Post*, 28 March 1999, Final Ed., A.

Rogers, A. P. V. "Zero Casualty Warfare."
<http://www.icrc.org/icrceng.nsf> accessed 11/02/2000

Rucci, Gregory Commander, USN "Do We Still Need Navy CSAR?" Proceedings vol 126/7/1,169 (July 2000): 58-61.

Stockdale, James B., Rear Admiral, USN "Experiences as a POW in Vietnam." Naval War College Review (January - February 1974): 2-6.

Tilford, Earl H. Jr. The United States Air Force Search and Rescue in Southeast Asia. Washington, D.C.: Center for Air Force History, 1992.

Van Creveld, Martin Command in War. Cambridge, Massachusetts: Harvard University Press, 1985.

Von Clausewitz, Carl. On War. Eds. and Trans. Michael Howard and Peter Paret. Princeton, New Jersey: Princeton University Press, 1976.

Weigley, Russell F., The American Way of War. Bloomington, Indiana: Indiana University Press, 1977.

Westermann, Edward B. Capt., USAF "Air Rescue Service - A Direction for the Twenty-First Century." Airpower Journal vol 4, no. 3 (Fall 1990): 60-71.

Weinberger, Casper and Schweizer, Peter, The Next War. Washington, D.C.: Regnery Publishing Inc., 1998.

Whitcomb, Darrel Col., USAFR, Retired. "Combat Search and Rescue a Longer Look." Aerospace Power Journal vol 14, no. 2 (Summer 2000): 28-35.

Whitcomb, Darrel D. The Rescue of BAT 21. Annapolis, Maryland: Naval Institute Press, 1998.